

NEW SPECIES AND COMBINATIONS IN MEXICAN HETEROTHECA  
(ASTERACEAE-ASTEREAE)

B. L. Turner

Department of Botany, University of Texas, Austin TX 78713

Recent collections from the upper Rio Mayo regions of Chihuahua have revealed the following undescribed species. Additionally, the recently described species, Haplopappus thiniicola and Osbertia chihuahuana, are transferred to Heterotheca.

HETEROTHECA VANDEVENDERORUM B. L. Turner, sp. nov.

H. mexicanae affinis sed pedunculis monocephalis glandulosis 20-30 cm longis et foliis albo-tomentosis differt.

Perennial erect herbs, 20-40 cm high. Stems white-tomentose, arising from a lignous, and probably rhizomatous, branched rootstock. Leaves oblanceolate to spatulate, white tomentose, mostly 2-3 cm long, 4-6 mm wide, crowded upon the lower part of the plant, the heads single on elongate naked, glandular-puberulent, peduncles up to 30 cm long. Involucre campanulate, 11-12 mm high, 15-18 mm wide; bracts linear lanceolate, 5-6 seriate, graduate, 3-12 mm long, ca 1 mm wide, the outer series glandular pubescent, the inner series with pinkish scarious margins. Receptacle plane or somewhat convex, 5-6 mm across. Ray corollas 21, pistillate, fertile; corollas glabrous, yellow; tube ca 6 mm long, the ligule ca 7 mm long, 2 mm wide, weakly 4-nerved, the apex with 3 short lobes. Disk florets numerous; corollas yellow, glabrous, ca 8 mm long; tube ca 5 mm long, the throat funnelform ca 2 mm long. Anthers ca 2.5 mm long. Achenes linear-falcate, flattened, ca 5 mm long, densely villous; pappus of 2-3 series, an inner 1-2 series of numerous delicate, readily deciduous, barbellate awns, 8-9 mm long, and an outer series of ca 30-40 very narrow, persistent lacerate scales 2-3 mm long.

TYPE: MEXICO. CHIHUAHUA: Rio Mayo Region, El Capitan (108°07'30"W x 28°13'30"N), 2000 m, 26 Jun 1986, P. S. Martin 56 (holotype TEX; isotype ARIZ).

This very distinctive species is named for Dr. and Mrs. VanDevender of The University of Arizona, Tucson, avid scholars of the vegetation and flora of northwestern Mexico and who first called the plant to my attention.

HETEROTHECA THINIICOLA (Rzed. & Ezcurra) B. L. Turner, comb. nov.  
based upon Haplopappus thiniicola Rzed. & Ezcurra, Ciencia  
Interamericana 26: 16. 1986.

The authors of this very distinct taxon relate it to Haplopappus (Hazardia) berberidis A. Gray or H. detonsus (Greene) Raven, albeit superficially. I would, however, include the species in the genus Heterotheca; it has all the characteristics of the latter except that the outer pappus bristles are essentially the same as the inner. Pappus bristles of a similar nature, however, occur in H. vandevendorum, H. mexicana and yet other species of Heterotheca (Turner, 1984). In over-all characteristics, including habit and geographical location it is probably closest to H. sessiliflora (Nutt.) Shinners.

HETEROTHECA CHIHUAHUANA (B. Turner & Sundberg) B. Turner comb. nov., based upon Osbertia chihuahuana B. Turner & Sundberg, Pl. Syst. Evol. 151: 233. 1986.

Because of the discovery of H. vandevendorum I have had second thoughts about inclusion of this taxon in Osbertia. Turner & Sundberg noted that the floral details of Osbertia chihuahuana and Heterotheca mexicana were quite similar. We emphasized the "Stolons" and terminal heads in positioning H. chihuahuana in Osbertia. It appears, however, that the "stolons" are actually shallow rhizomes and, what with the terminal heads in H. vandevendorum, it seems best placed in Heterotheca somewhere between the latter and H. mexicana. I now predict a chromosome count of  $n=9$ , instead of the  $n=5$ , if the species were especially close to Osbertia.

#### ACKNOWLEDGEMENTS

I am grateful to Dr. Guy Nesom for the Latin diagnosis and to Dr. J. Rzedowski for providing me with a reprint of his paper on Haplopappus thiniicola.

#### LITERATURE CITED

Turner, B. L. 1984. Three new species of Heterotheca (Asteraceae-Astereae) from northern Mexico. *Phytologia* 55: 204-208.